

CLAIMS

1. A radio communication apparatus comprising:

a decoder for performing decoding processing on receive data every decoding unit;

5 a judging unit for judging the presence or absence of errors in decoded receive data every transmission unit;

an updater for updating a reference value of a value indicating reception quality according to said presence or absence of errors; and

10 a generator for generating a transmission power control bit according to the result of comparison of an updated reference value and a value indicating measured reception quality;

wherein said updater, when an error is detected,
15 increments said reference value a predetermined number of times within a decoding unit.

2. The radio communication apparatus according to claim 1, wherein said updater increments said reference value
20 by a predetermined increment width only when an error is first detected within a decoding unit.

3. The radio communication apparatus according to claim 1, further comprising a counter for counting the number
25 of errors within a decoding unit; wherein said updater, when an error is not detected, decrements a reference value by a decrement width that is in accordance with the number of errors counted by said counter.

4. The radio communication apparatus according to claim 3, wherein said updater increases the decrement width proportionately as the number of errors increases.

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5. A communication terminal apparatus incorporating a radio communication apparatus, said radio communication apparatus comprising:

10 a decoder for performing decoding processing on receive data every decoding unit;

a judging unit for judging the presence or absence of errors in decoded receive data every transmission unit;

15 an updater for updating a reference value of a value indicating reception quality according to said presence or absence of errors; and

a generator for generating a transmission power control bit according to the result of comparison of an updated reference value and a value indicating measured reception quality;

20 wherein said updater, when an error is detected, increments said reference value a predetermined number of times within a decoding unit.

25 6. A base station apparatus incorporating a radio communication apparatus, said radio communication apparatus comprising:

a decoder for performing decoding processing on receive data every decoding unit;

an updater for updating a reference value of a value
indicating reception quality according to said presence

a generator for generating a transmission power control bit according to the result of comparison of an updated reference value and a value indicating measured reception quality;

7. A transmission power control method for performing decoding processing on receive data every decoding unit; judging the presence or absence of errors in decoded receive data every transmission unit; updating a reference value of a value indicating reception quality each time an error is detected up to a predetermined number of times within a decoding unit; and generating a transmission power control bit according to the result of comparison of an updated reference value and a value indicating measured reception quality.

25 8. The transmission power control method according to claim 7, wherein the number of errors within a decoding unit are counted, and if an error is not detected, a reference value is updated by being decremented by a

$\frac{d}{dt} \left(\frac{\partial L}{\partial \dot{x}} \right) = \frac{\partial L}{\partial x}$